IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of   : : EXPEDITED PROCEDURE
                                                        : :
Seong Woon KIM et al.   :
                                                        :
Serial No. 10/676,116   : Group Art Unit: 2111
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Filed: October 2, 2003   : Examiner: Ryan M. Stiglic
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For: NETWORK-STORAGE APPARATUS FOR HIGH-SPEED STREAMING DATA
       TRANSMISSION THROUGH NETWORK

PRE-APPEAL BRIEF REQUEST FOR REVIEW

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Sir:

This paper is submitted in reply to the Office Action mailed *February 1, 2008.*

Appellants respectfully request review of the final rejections of claims **1, and 3-9** as manifested in the Office Action. No amendments are being filed with this request.

This request is being filed with a Notice of Appeal in compliance with *37 CFR 41.31.*

The review is requested for the reasons stated on the attached sheets.

REMARKS

Claims 1 and 3-9 stand rejected under 35 U.S.C. §103(a) over U.S. Patent Application No. 2001/0037406 to Philbrick et al.

At the outset, the asserted combination of references does not teach or suggest all of Appellants' claim limitations. Appellants' network storage apparatus recites, *inter alia*, a disk save buffer (DSB) table stored in a TCP/IP outboard engine (TOE) that allows high-speed streaming of data through the network to disk storage by eliminating the need for communications via a bus mounted processor, which would otherwise throttle network traffic throughput. Specifically, claim 1 recites:

> "wherein the TOE includes a <u>DSB table having information on packet data to be</u> <u>transferred to disk storage immediately among data packets received from the</u> <u>network</u>." (Emphasis added).

The Examiner asserts that Philbrick discloses the above feature. Appellants respectfully disagree and submit that the DSB table recited in claim 1 is distinguished from the communication control block (CCB) disclosed by Philbrick. For example, Philbrick at paragraph [0050] appears to only disclose wherein the:

> "A communication control block (CCB) is created by the protocol stack 38 during connection initialization procedures for connection-based messages, such as typified by TCP/IP or SPX/IPX protocols. <u>The CCB includes connection information, such</u> <u>as source and destination addresses and ports</u>. For TCP connections a CCB comprises source and destination media access control (MAC) addresses, source and destination IP addresses, source and destination TCP ports and TCP variables such as timers and receive and transmit windows for sliding window protocols. After a connection has been set up, the CCB is passed by INIC driver 39 from the host to the INIC memory 46 by writing to a command register in that memory 46,

where it may be stored along with other CCBs in CCB cache 74. The INIC also creates a hash table corresponding to the cached CCBs for accelerated matching of the CCBs with packet summaries." (Emphasis added).

Philbrick further discloses at paragraph [0052] wherein a packet summary of a subsequently received packet by the sequencers is compared to CCBs to determine if the packet belongs to a message for which a fast-path connection has been set up can be transferred to a main memory via a DMA channel.

The DSB recited in the present invention on the other hand, relates to a Disk Save Buffer Table having information on packet data "to be transferred to disk storage immediately among data packets received from the network."

Furthermore, when transmitting data over a network port, the present invention is configured to determine whether the DSB can retrieve data from disk, and if so, read data directly from the disk for output to the network port. When receiving data from the network port, the invention confirms whether the DSB is able to sent data to the disk, and if so, transmit data directly to disk.

The CCB of Philbrick, on the other hand is configured to know fast-path connection information, and therefore is distinguished from the recited DSB in both structure and configured purpose.

Accordingly, because Philbrick does not disclose, teach or suggest each and every feature recited in claim 1, the rejection of claim 1 under 35 U.S.C. §102(b) is improper. Appellants respectfully submit, therefore, that independent claim 1 is patentable over Philbrick. Claims 3-9 are likewise patentable over Philbrick at least for their dependence on an allowable base claim, as well as for additional features they recite. Withdrawal of the rejection over Philbrick is respectfully requested.

To the extent necessary, a petition for an extension of time under *37 C.F.R. 1.136* is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account <u>07-1337</u> and please credit any excess fees to such deposit account.

Respectfully submitted,
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